



IEC 60335-2-17 Blanket Mechanical Strength Test Apparatus

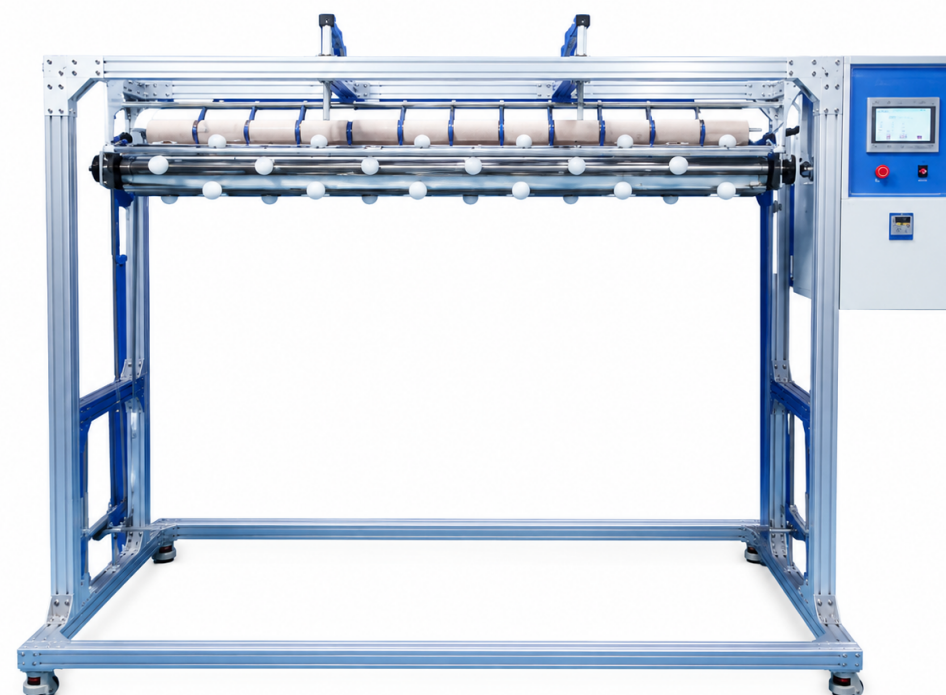
Product Catalogue

Laboratory test equipment for mechanical strength evaluation of electric blankets, heating pads and similar flexible heating appliances according to IEC 60335-2-17 test requirements.

25° Horizontal Angle

IEC 60335-2-17

Figure BB.1-BB.3



Standards

IEC 60335-2-17 / Figure BB.1 to BB.3

Test Object

Electric blankets and heating pads

Main Structure

25° arms, drum, rubber spheres

Max Blanket Size

2100 x 2000 mm

Product Overview and Test Scope

This apparatus provides a dedicated and repeatable setup for IEC 60335-2-17 related mechanical strength testing. It focuses on the durability of complete flexible heating appliances where repeated movement may affect heating wires, insulation layers, textile structures and internal conductors.

Standard-oriented test scope

Designed for IEC 60335-2-17 related testing of electric blankets, heating pads and similar flexible heating appliances.

Repeated mechanical movement

The sprocket and drum structure applies repeated movement to help evaluate product durability after simulated use.

Dedicated blanket test structure

25° horizontal arms, rotating drum and rubber spheres reproduce the required blanket mechanical test action.

Electrical testing remains separate

This machine performs the mechanical procedure; electrical strength or dielectric checks require separate safety test equipment.

Blanket Strength Tester

IEC 60335-2-17



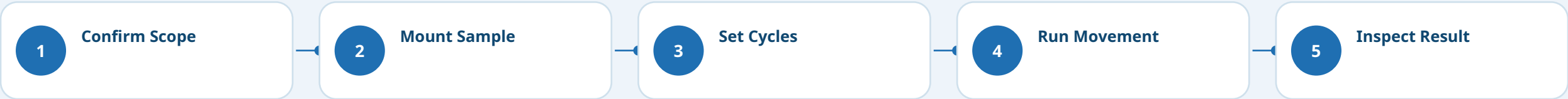
Mechanical strength test

Electric blankets

Heating pads

Compliance preparation

Functional Test Flow



Detailed Technical Specifications

The following parameters summarize the catalogue-level configuration. Final setup and documentation should be reviewed according to the applicable standard version, sample size and laboratory procedure.

Standard and Test Application

Parameter	Specification
Applicable standard	IEC 60335-2-17, Figure BB.1 to BB.3
Equipment type	Blanket mechanical strength test apparatus
Test object	Electric blankets, heating pads and similar flexible appliances
Test purpose	Mechanical strength evaluation after repeated movement
Documentation	Calibration certificate available; items to be confirmed

Mechanical Structure and Operation

Parameter	Specification
Horizontal angle of arms	25°
Rubber spheres	R30 mm, hardness 40-50 HR
Diameter of sprocket	230 mm
Rotating drum size	Ø160 x 2000 mm
Square bar support	25 x 25 x 2000 mm
Hardwood cylinder force	5.1 N applied on drum

Instrument Configuration

Parameter	Specification
Overall dimension	2500 x 800 x 2500 mm (L x D x H)
Max blanket size	2100 x 2000 mm
Control method	Button control + meter
Test cycles	0-9999 cycles, typical setting 1000 cycles
Driving sprocket speed	33 r/min
Lifting device	Double sprocket cylinder lifts
Weight capacity	6 kg/m or total mass 6.5 kg

Technical Note

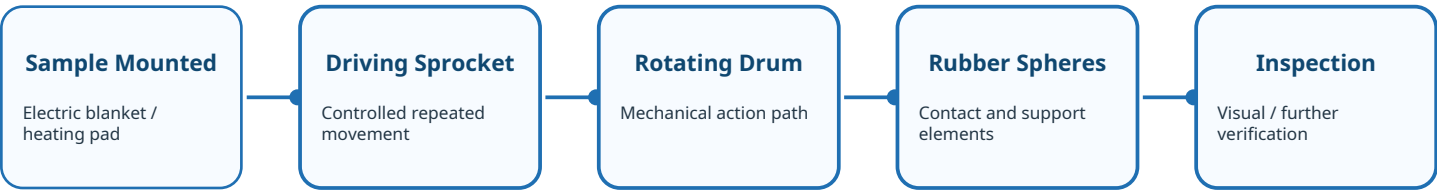
This apparatus is for the mechanical strength procedure only. For post-test electrical strength, insulation or dielectric verification, select suitable separate electrical safety test equipment according to the required clauses.

Testing Principle and Workflow

The test arrangement subjects the complete flexible heating appliance to repeated mechanical movement. The purpose is to evaluate structural durability around the heating elements, textile layers, insulation areas and connection parts.

Mechanical Strength Test Concept

Representative functional path for IEC 60335-2-17 blanket evaluation



Note: This is a catalogue-level concept. Final operation should follow the applicable standard and laboratory procedure.

Core Mechanism Values

- Horizontal arms: 25°
- Driving sprocket: 33 r/min
- Rubber spheres: R30 mm
- Rotating drum: Ø160 x 2000 mm

Test Method Notes

- Confirm test scope and sample size.
- Mount sample according to test arrangement.
- Set required cycle count and run test.
- Inspect sample and perform further checks if required.



Product Views and Laboratory Operation

Multiple viewing angles help customers understand the full machine structure, roller assembly, control cabinet, rear arrangement and real laboratory operating context.



Front View



Side-angle View



High-angle View



Rear View

Applications, Compliance and Product Distinction

Typical Users

- Electric blanket and heating pad manufacturers
- Electrical safety testing laboratories
- Certification preparation teams
- R&D and quality control departments

Compliance and Regulatory Assurance

The apparatus supports mechanical strength evaluation according to the selected IEC 60335-2-17 test scope. Final test settings should be confirmed according to the applicable IEC, EN or GB standard version and the laboratory test plan.

Product Distinction

- Mechanical strength apparatus: repeated movement and structural durability evaluation.
- Spark ignition apparatus: ignition-related safety evaluation.
- Electrical strength tester: insulation or dielectric verification after the mechanical test if required.



Laboratory Operation Scenario

Technical Inquiry and Configuration Support

KingPo supplies IEC 60335-2-17 blanket mechanical strength test equipment for electric blankets, heating pads and similar flexible heating appliances. Our engineering team can review your standard version, test clause, sample size, cycle requirement and documentation needs.

Please Provide the Following Information

- **Applicable standard:** IEC 60335-2-17, EN or GB adoption version
- **Test object:** Electric blanket, heating pad, heated mattress pad or similar flexible appliance
- **Related clause:** Required test clause, figure reference or laboratory procedure
- **Test requirement:** Mechanical strength test cycle count and sample arrangement
- **Sample information:** Maximum blanket size, weight, structure and special fixture requirement
- **Documentation:** Calibration certificate, inspection record or user manual needs
- **Customization needs:** Fixture, safety guard, control method, logo position or packaging requirement

Product Page



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